

Smart Water Application Technology™ (SWAT™) Performance Report

Testing Agency: Center for Irrigation Technology	www.californiawater.org
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Product: Rain Bird SST Smart Controller
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Product Type: Climatologically Based Controller
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Product Description: Rain Bird SST Smart Controller uses "Simple to Set" programming and automatically adjusts the irrigation schedule taking into account both the seasons and current weather conditions. The Rain Bird SST Smart Controller uses a combination of a nationwide historical weather database that is identified by zip code of controller location and a Smart Weather Sensor to adjust the user created irrigation schedule.

SWAT Protocol*: Turf and Landscape Equipment Climatologically Based Controllers 8th Draft Testing Protocol (Sept. 2008)
 The concept of climatologically controlling irrigation systems has an extensive history of scientific study and documentation. The objective of this protocol is to evaluate how well current commercial technology has integrated the scientific data into a practical system that meets the agronomic needs of turf and landscape plants. The evaluation is accomplished by creating a virtual landscape subjected to a representative climate to evaluate the ability of individual controllers to adequately and efficiently irrigate that landscape. After initial programming and calibration the controller is expected to perform without further intervention during the test period. Performance results indicate to what degree the controller maintained root zone moistures within an acceptable range. If moisture levels are maintained without deficit, it can be assumed the crop growth and quality will be adequate. If moisture levels are maintained without excess it can be assumed that scheduling is efficient.

*All SWAT protocols may be viewed at www.irrigation.org

Rain Bird SST Smart Controller SWAT™ Performance Summary

Irrigation Adequacy	Irrigation Excess
<p>Minimum of 6 test zones: 99% Maximum of 6 test zones: 100% Mean/Average of 6 test zones: 99.8% Irrigation Adequacy represents how well irrigation met the needs of the plant material. This reflects the percentage of required water for turf or plant material supplied by rainfall and controller-scheduled irrigations. Research suggests that if this value is between 80% and 100%, the acceptable quality of vegetation will be maintained.</p>	<p>Minimum of 6 test zones: 0% Maximum of 6 test zones: 2.2% Mean/Average of 6 test zones: 0.7% Irrigation Excess represents how much irrigation water was applied beyond the needs of the plant material. This reflects the percentage of water applied in excess of 100% of required water according to data from CIMIS station #80 Fresno State, Fresno County during the test period.</p>

Product Detail Supplied by Manufacturer

Rain Bird SST Smart Controller	www.rainbird.com
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Installation	Data Source	Data Link	Initial Purchase	Additional Hardware	Additional Fees
Residential controller	On-site temperature and rainfall sensor and built-in historical weather database	2-wire connection	Purchase price includes controller and Smart Weather Sensor	<input type="checkbox"/> Rain Switch <input type="checkbox"/> Temperature Sensor	None

Additional Features

Zones	Time of Day	Day of Week	Other	If Data Link is Discontinued
6 or 12 stations	Independently schedule each zone	Schedule by day of week or odd/even watering	<input type="checkbox"/> Intuitive, simple programming. <input type="checkbox"/> Smart runtime calculator available for optimum scheduling <input type="checkbox"/> Durable design for indoor or outdoor mounting	Makes watering adjustments based on embedded historical weather database. LED indicator to alert that sensor connection is lost.